## UNITED STATES PATENT AND TRADEMARK OFFICE

## **CERTIFICATE OF CORRECTION**

PATENT NO. : 7,552,120 B2 Page 1 of 1

APPLICATION NO.: 10/580747
DATED: June 23, 2009
INVENTOR(S): Hassane Essafi et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 27, line 39, Equation 25, reads:

$$\hat{C}_{p} = \frac{1}{L \times T} \sum_{n=0}^{L-1} \sum_{m=0}^{r-1} y(n, m) \cos(n\hat{\omega}_{p} + m\hat{v}_{p})$$
 (25)

should read

$$\hat{C}_{p} = \frac{1}{L \times T} \sum_{n=0}^{L-1} \sum_{m=0}^{T-1} y(n, m) \cos(n\hat{\omega}_{p} + m\hat{v}_{p})$$
---

Column 27, line 42, Equation 26, reads:

$$\hat{D}_{p} = \frac{1}{L \times T} \sum_{n=0}^{L-1} \sum_{m=0}^{r-1} y(n,m) \cos(n\hat{\omega}_{p} + m\hat{v}_{p})$$
 (26)

should read

$$\hat{D}_{p} = \frac{1}{L \times T} \sum_{n=0}^{L-1} \sum_{m=0}^{T-1} y(n,m) \cos(n\hat{\omega}_{p} + m\hat{v}_{p})$$
--; and

Column 30, line 16, "FIG. **20**: **19**; **6**; **5**; **4**; **4**; **8**; **11**." should read --FIG. 20: 19; 6; 5; 4; 4; 8; 11.--.

Signed and Sealed this

Thirtieth Day of November, 2010

David J. Kappos Director of the United States Patent and Trademark Office